

III. ROLES AND RESPONSIBILITIES

This chapter identifies and describes state, federal and local government agencies and programs that provide and manage parks and open space. It also identifies and describes the primary non-profit and commercial groups involved in providing outdoor recreation to the state's citizens.

STATE PROGRAMS

N.C. State Parks System

The North Carolina State Parks System was created in 1916 when Mount Mitchell became the first state park. Since then, the system has grown through gifts from private sources, transfers of publicly owned lands, grant funds and legislative appropriations to buy land. It now encompasses approximately 197,347 acres of land and water organized into 34 park units that are staffed and open to the public and 25 other management areas (Table III-1 and Figure III-1).

The Division of Parks and Recreation, within the Department of Environment and Natural Resources, manages the state parks system. Division responsibilities include:

- acquiring and managing park lands;
- developing and implementing master plans for state park units;
- developing and maintaining park facilities; and
- operating the current state parks system.

The state parks system contains some of the nation's outstanding natural features and provides family-oriented recreational opportunities, including:

- natural and scenic rivers, such as the New River in Ashe and Alleghany counties;
- state lakes, such as Lake Waccamaw in Columbus County;
- state natural areas, such as Theodore Roosevelt State Natural Area in Carteret County;
- state recreation areas, such as Kerr Lake in Vance and Warren counties; and
- state trails, such as the Lumber River Trail.

These open spaces and natural settings continue to grow in importance as the state moves from a rural environment to an increasingly urban environment. Common recreational activities at the developed parks include hiking, tent and trailer camping, swimming, all types of boating, salt and fresh water fishing, and family and group picnicking.

The state parks system has adopted the following mission statement:

The North Carolina state parks system exists for the enjoyment, education, health, and inspiration of all our citizens and visitors. The mission of the state parks system is to conserve and protect representative examples of the natural beauty, ecological features, and recreation resources of statewide significance; to provide outdoor recreation opportunities in a safe and healthy environment; and to provide education opportunities that promote stewardship of the state's natural heritage.

Table III-1. Units of the State Parks System, 2002**STATE PARKS**

1. Bay Tree Lake (established 1939)
- *2. Carolina Beach (1969)
- *3. Cliffs of the Neuse (1945)
- *4. Crowders Mountain (1973)
- *5. Eno River (1973)
- *6. Fort Macon (1924)
- *7. Goose Creek (1974)
- *8. Hammocks Beach (1961)
- *9. Hanging Rock (1936)
- *10. Jockey's Ridge (1975)
- *11. Jones Lake (1939)
- *12. Lake James (1985)
- *13. Lake Norman (1962)
- *14. Lake Waccamaw (1976)
- *15. Lumber River (1989)
- *16. Medoc Mountain (1973)
- *17. Merchants Millpond (1973)
- *18. Morrow Mountain (1935)
- *19. Mount Mitchell (1916)
- *20. New River (1977)
- *21. Pettigrew (1939)
- *22. Pilot Mountain (1968)
- *23. Raven Rock (1970)
- *24. Singletary Lake Group Camp (1939)
- *25. South Mountains (1976)
- *26. Stone Mountain (1969)
27. Waynesborough (1979)
- *28. William B. Umstead (1943)

STATE LAKES

1. Bay Tree Lake (1939)
2. Jones Lake (1939)
3. Lake Phelps (1947)
4. Lake Waccamaw (1976)
5. Salters Lake (1939)
6. Singletary Lake (1939)
7. White Lake (1929)

STATE RECREATION AREAS

- *1. Falls Lake (1982)
- *2. Fort Fisher (1986)
- *3. Jordan Lake (1982)
- *4. Kerr Lake (1951)

STATE RIVERS

1. Horsepasture River (1986)
2. Linville River (1975)
3. Lumber River (1989)
4. New River (1975)

STATE TRAILS

1. Falls Lake/Wake County Trail
2. French Broad River Trail
3. Lower Lumber River Trail
4. Yadkin River Trail

STATE NATURAL AREAS

1. Baldhead Island (1979)
2. Beech Creek Bog (2002)
3. Bullhead Mountain (2000)
4. Bushy Lake (1970)
5. Chowan Swamp (1974)
6. Dismal Swamp (1974)
7. Elk Knob (2002)
- #8. Hemlock Bluffs (1976)
9. Lea Island (2000)
10. Masonboro Island (1976)
11. Mitchells Mill (1976)
- *12. Mount Jefferson (1956)
13. Theodore Roosevelt (1971)
- *14. Weymouth Woods (1963)

* Operated Units — Units that have one or more full-time staff persons, visitor facilities, and are open to the public.

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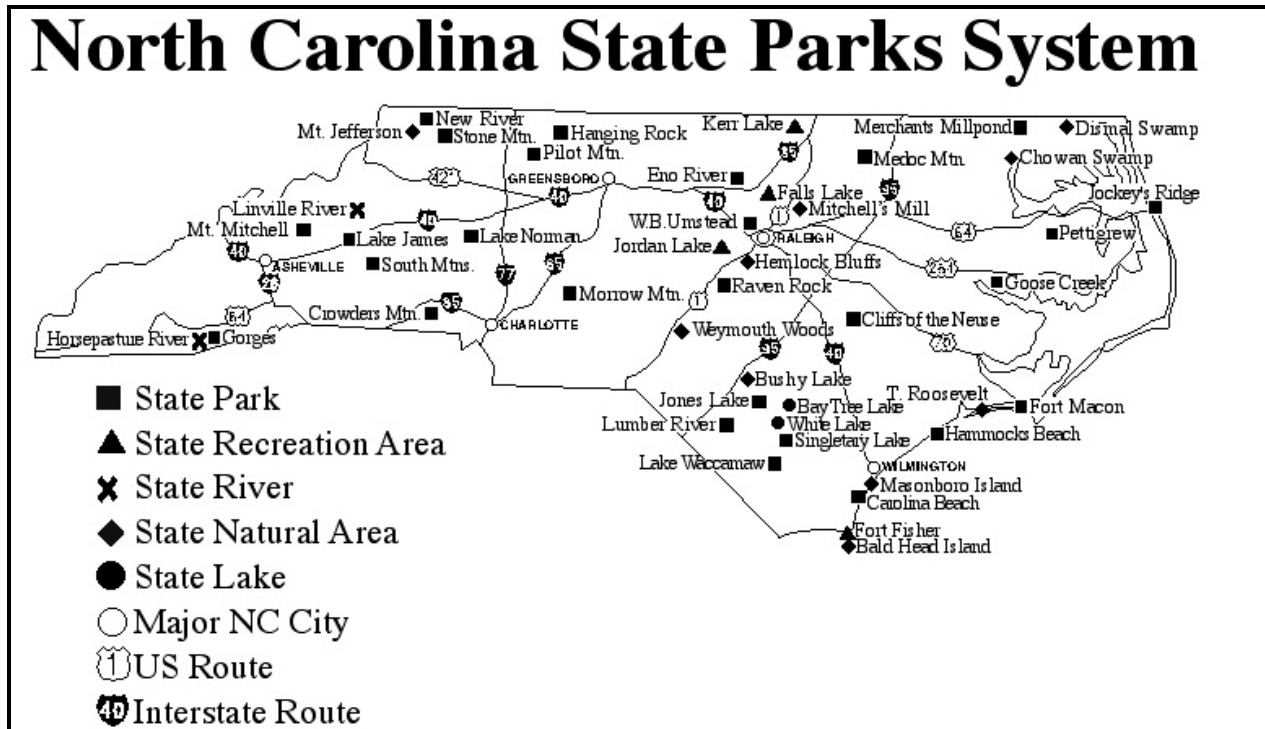


Figure III-1.

The N.C. Natural and Scenic Rivers System

The N.C. Natural and Scenic Rivers Act was passed by the 1971 General Assembly to preserve and protect outstanding free-flowing rivers, their water quality, and their adjacent lands for the benefit of present and future generations. The Act seeks to protect rivers with outstanding natural, scenic, educational, geological, recreational, historic, fish and wildlife, scientific, and cultural values.

In passing the Act, the General Assembly recognized the "*necessity for a rational balance between the conduct of man and the preservation of the natural beauty along the many rivers of the state.*"

Types of Rivers

The Natural and Scenic Rivers Act defines three types of rivers as being eligible for inclusion in the Natural and Scenic Rivers System: natural river areas, scenic river areas, and recreational river areas. They are defined as follows:

Natural river areas — Those free-flowing rivers or segments of rivers and adjacent lands existing in a natural condition. Those rivers or segments of rivers that are free of man-made impoundments and generally inaccessible except by trail, with the lands within the boundaries essentially primitive and the waters essentially unpolluted. These represent vestiges of primitive America.

Scenic river areas — *Those rivers or segments of rivers that are largely free of impoundments, with the lands within the boundaries largely primitive and largely undeveloped, but accessible in places by roads.*

Recreational river areas — *Those rivers or segments of rivers that offer outstanding recreation and scenic values and that are largely free of impoundments. They may have some development along their shorelines and have more extensive public access than natural or scenic river segments. Recreational river segments may also link two or more natural and/or scenic river segments to provide a contiguous designated river area.*

Criteria for Designation

To be designated as either a natural river or a scenic river, the following criteria must be present:

1. River segment length must be no less than one mile.
2. Boundaries of the system shall be the visual horizon or such distance from each shoreline as may be determined to be necessary, but no less than 20 feet.
3. Water quality shall be at least class "C".
4. Water flow shall be continuous and not subjected to withdrawal or regulation to the extent of substantially altering the natural ecology of the stream.
5. Public access shall be limited.

Protection Provided by Designation

The Natural and Scenic Rivers Act offers protection for designated river segments in three ways:

1. Project works – such as dams, reservoirs, water conduits, transmission lines, and water resources projects that would have direct and adverse effects – are restricted (G.S.113A-44).
2. Acquisition of riparian lands in either fee simple or lesser interests, such as conservation easements, is permitted (G.S.113A-38).
3. Management activities may be instituted by the Department of Environment, Health, and Natural Resources in performing its duties and responsibilities (G.S.113A-36).

Of three types of protection authorized by the Natural and Scenic Rivers Act, only the first automatically occurs upon designation. Riparian lands are not affected until acquisition of land or interest in land takes place by the state or local governments adopt protecting regulations. Since establishment of the Natural and Scenic Rivers System in 1971, legislative appropriations for acquisition, development, and operations of designated river corridors have been minimal. A report – *An Assessment of the N.C. Natural and Scenic Rivers System* – has been prepared. It offers a detailed critical review of the rivers system and makes recommendations for strengthening the system.

Components of the Natural and Scenic Rivers System

Since 1971, four rivers have become components of the Natural and Scenic Rivers System. These are the New River, the Linville River, the Horsepasture River, and the Lumber River.

North Carolina Trails System

In 1973, the North Carolina General Assembly ratified the North Carolina Trails System. (G.S. 113A, Article 6). The act introduced the following mandate and purpose:

...in order to provide for the ever increasing outdoor recreation needs of an expanded population and in order to promote public access to, travel within, and enjoyment and appreciation of the outdoor, natural remote areas of the state, trails should be established in natural, scenic areas of the state, and in and near urban areas.

...the purpose of this article is to provide the means for attaining these objectives by instituting a state system of scenic and recreation trails, coordinated with and complemented by existing and future local trail segments or systems, and by prescribing the methods by which, and standards according to which, components may be added to the State Trails System.

The State Trails System is composed of the following types of trails:

- State Recreation Trails - Trails that provide for a variety of outdoor recreation uses in or near the urban areas of North Carolina. They may include trails for hiker travel, horseback riding, non-motorized bicycles, non-motorized watercraft, and two-wheel and four-wheel drive motorized vehicles (off-road vehicles)
- State Scenic Trails - Trails that are longer in distance and located to provide maximum potential for the appreciation of natural areas and for the appreciation and enjoyment of significant scenic, historic, ecological, geologic or cultural areas through which such trails may pass.
- Connecting/Side Trails - Trails that provide additional points of public access to State Recreation or State Scenic Trails or provide connections between these trails.

North Carolina Trails Committee

The Act also established the seven-member North Carolina Trails Committee to advise the Secretary of the Department of Environment and Natural Resources on all trails related activities. The Committee represents the different trail user groups and geographic regions of the state.

State Trails Program

The Division of Parks and Recreation's State Trails Program promotes and coordinates statewide trail planning and development activities among federal, local and state government agencies; regional council of governments; non-profit organizations; and volunteer trail organizations.

In promoting and coordinating the development of trails for foot travel, horseback, bicycles, non-motorized water vehicles, two-wheel drive motorized vehicles and multiple use trails, the State Trails Program works primarily with five trail movements in North Carolina: State Trails; Greenways/Open Space Preservation; Rails-to-Trails; River Trails; and State Park System Trails. To assist in administering, promoting and coordinating the trail movements among agencies and organizations, the State Trails Program provides professional comprehensive statewide trail planning and consultation on trail development and management. It also administers the state funded Adopt-A-Trail Grant Program and the federally funded Recreational Trails Program for building, maintaining and managing trails.

Interstate, State, Regional and Local Trail Initiatives

The State Trails Program staff are providing consultation, technical assistance and grant opportunities to interstate trail efforts that traverse or are planned to traverse South Carolina, North Carolina and Virginia. These trail efforts include the popular Appalachian Trail, the Overmountain Victory Trail, the East Coast Greenway and the Inside Passage Trail.

The Appalachian Trail is a very popular and recognized interstate trail that traverses South Carolina, North Carolina and Virginia. The Overmountain Victory National Historic Trail commemorates the route taken by men from North Carolina, Tennessee and Virginia as they joined in the Battle of Kings Mountain in South Carolina. The East Coast Greenway is a planned 2,600 mile traffic-free path. It is to link East Coast cities from Maine to Florida. The Inside Passage Trail is a proposed kayak trail along the Western side of the Outer Banks of North Carolina from Virginia to South Carolina.

The Mountains to Sea Trail will traverse North Carolina and connect Clingman's Dome in the Great Smoky Mountains National Park to Jockey's Ridge State Park on the Outer Banks. Approximately 400 miles of the proposed 800 miles have been completed.

Regional and local trail efforts include the Roanoke River Partners and the American Tobacco Trail. The Roanoke River Partners is a partnership between Halifax, Northampton, Bertie, Martin and Washington counties with the goals of promoting natural and cultural resource-based tourism and development and the encouragement of sustainable development - including canoeing, bicycling, history and agricultural tours. The American Tobacco Trail is a planned 20 mile long rail to trail conversion which will connect the City of Durham with Chatham and Wake counties.

By creating a network of trails for all users – hikers, bikers, equestrians, canoeists and off-road vehicle enthusiasts – citizens and visitors to North Carolina can experience and enjoy the state's natural, cultural and recreational resources.

North Carolina Natural Heritage Program

The goal of the Natural Heritage Program is the preservation of the natural diversity of North Carolina. The Natural Heritage Program is the first comprehensive attempt to determine, through an intensive state-wide inventory, the state's most significant natural areas. Through the inventory, areas of prime ecological significance can be identified and recommendations for protection of these areas can be made.

Using the information from the Heritage inventory, the state can identify areas that best represent its natural heritage and determine if these areas are being adequately safeguarded. A state register recognizes important natural areas, public and private, in conservation management. Long-term results of the program can mean that the state's resources will remain for the benefit and enjoyment of future generations.

The Natural Heritage Program was established in 1976 with the assistance of The Nature Conservancy. The Nature Conservancy is a national nonprofit organization dedicated to the preservation of ecologically significant land. It has assisted the state in the acquisition of many outstanding natural areas.

The program's statement of goals and objectives is as follows:

Goal: Preserve the natural diversity of North Carolina.

Objectives:

1. Identify through a systematic inventory and assessment the special natural resources and natural areas that best exemplify North Carolina's natural heritage.
2. Provide inventory information for use in resource management and development decisions.
3. Establish a statewide system of protected natural areas in public and private ownership.
4. Provide management advice to owners of natural area and assist in the protection of those areas.
5. Involve citizens and landowners in preserving North Carolina's natural heritage.
6. Increase public awareness and appreciation of our natural environment.
7. Coordinate with other public agencies, scientists and citizen organizations to protect our natural environment.
8. Promote establishment of local land conservancies and provide technical assistance to them for acquisition, management and inventory.

The Natural Heritage Inventory

The inventory focuses on the elements, or components, of natural diversity including those that are exemplary or rare on a statewide or national basis. A classification of element types has been developed so researchers can catalog the state's vulnerable plant and animal species, natural communities and significant natural areas. Information on the existence, number, condition, status and location of all significant examples is collected. Detailed information on all these resources is invaluable in setting protection priorities.

The Heritage inventory is a cumulative process. As information is updated and refined, the ability of experts to identify, evaluate and protect the natural areas within the state improves.

Many valuable natural areas have been destroyed from a lack of awareness and understanding of their biological significance. Planners, developers and government officials use Heritage inventory information to avoid the inadvertent destruction of significant natural areas and prevent unnecessary conflicts.

Protection of Natural Lands

The Registry of Natural Heritage Areas encourages conservation of outstanding natural areas. The registry honors the owners and administrators of recognized natural areas committed to the protection of the natural qualities of the land. This non-binding, non-regulatory program recognizes landowners for being good conservationists. An eligible natural area is entered on the registry only after the owner voluntarily agrees to its designation.

Land acquisition may be advisable to ensure protection of highly critical areas and may be achieved by several means. Many valuable natural areas can be preserved through donations of land by private individuals or corporations. Gifts of land to public agencies or non-profit preservation organizations are tax-deductible. In some cases, landowners who donate their land for preservation purposes can obtain significant financial advantages while also having the satisfaction of knowing the land will be preserved according to their wishes.

If a private landowner wishes to retain ownership and still ensure that the land will remain in a natural condition, conservation easements may be considered. Easements can protect the land from being used for purposes that would destroy its natural quality. The value of the easement can be considered a charitable contribution for tax purposes.

Natural areas already in public ownership can be protected from misuse or damaging changes by dedicating them as part of the nature preserves system.

Dedication gives an area permanent protection and recognition. The North Carolina Department of Environment and Natural Resources can facilitate protection of natural areas.

Recreation Resources Service

Recreation Resources Service (RRS), operated for the School of Forest Resources at N.C. State University, began operations in July of 1987 as a clearinghouse and resource center. RRS provides technical materials, information, networking, continuing education and research to park and recreation providers in North Carolina, both public and private. Its services are available free of charge to municipal, county, state and federal governments and public and private agencies or individuals engaged in or contemplating activity in parks and recreation-oriented programs in North Carolina. A high percentage of its requests for service have come from county and municipal governments. Recreation Resources Service, funded through a contract with the N.C. Department of Environment and Natural Resources, fulfills legislative responsibilities of the N.C. Division of Parks and Recreation.

Recreation Resources Service has produced many publications, such as *The Annual Municipal and County Park and Recreation Services Study*, *Guidelines for the Design and Construction of Baseball and Softball Facilities*, *Fitness Standards*, *Directory of Resident Camps in North Carolina* and *Revenue Pricing and Policy Manual*. It has also awarded grants to municipalities and universities for a variety of purposes, such as computer application in parks and recreation, an aging management institute, greenways and open space and economic impacts of parks and recreation. Numerous conferences and workshops have also been sponsored or conducted by RRS. RRS also plays a major role in assisting local governments with grants for Land and Water Conservation Fund and Parks and Recreation Trust Fund assistance.

Public Beach and Coastal Waterfront Access Program

In 1974, the General Assembly passed the Coastal Area Management Act (CAMA) to protect and manage coastal resources. This legislation promotes the wise use of coastal resources through the Division of Coastal Management of the Department of Environment and Natural Resources.

The Public Beach and Coastal Waterfront Access Program, created in 1981 by the N.C. General Assembly, makes about \$1 million annually in matching grants to local governments to improve pedestrian access to the state's beaches and waterways. The program originally focused on beach access but was expanded in 1983 to include North Carolina's vast network of estuarine shorelines, coastal rivers and urban waterfronts.

More than 260 access sites have been constructed since the program began. Local governments are responsible for construction, operation and long-term maintenance of their sites. These sites, plus other public beach access sites, are marked with easily identified blue and orange CAMA signs. The access sites range from large regional facilities with parking, restrooms, showers, dune crossovers, water fountains and life guards to small local facilities providing dune crossovers.

North Carolina National Estuarine Research Reserve

The North Carolina National Estuarine Research Reserve is a natural outdoor laboratory where scientists, students and the public can study estuarine dynamics and learn about coastal natural areas. Established in 1982, the reserve is a collection of four representative estuarine ecosystems along North Carolina's coast. The sites contain 9,788 acres of barrier islands, salt marshes and tidal waters, habitat for hundreds of species of fish, bird and other wildlife.

The reserve is a part of the National Estuarine Reserve Research System that was created by Congress in the 1970's as rapid development along the nation's coasts was reducing the number of undisturbed estuaries. The national program provides states with matching funds to set up reserves that will ensure that natural estuarine areas are available for scientific research and public education.

The specific goals of the N.C. National Estuarine Research Reserve are:

1. To preserve estuarine areas characteristic of North Carolina's coast and make them available for study of the processes, functions and influences that shape and sustain estuaries.
2. To provide new information on estuarine ecosystem processes and influences to decision-makers as a basis for the sound management of coastal resources.
3. To increase public awareness and understanding of estuarine ecosystems by providing areas where people can directly observe the importance of estuaries to the state and county and how they are affected by human activities.
4. To provide for traditional uses of estuarine areas, such as hunting and fishing, which will not disturb the reserve environment and are compatible with the research and educational activities taking place there.

Reserve Sites

North Carolina's estuarine system – the third largest in the nation and the fourth most productive – is exceptionally diverse. It lies within two biogeographic regions, the Virginian and the Carolinian, and has many different salinity regimes, basin types and tidal patterns.

The multiple-site reserve reflects North Carolina's estuarine complexity. Each of the sites within the reserve is described below.

Currituck Banks in Northeastern North Carolina is an excellent example of an undisturbed barrier island/low salinity estuarine complex of the Virginian Biogeographic Region. It lies within the transition zone between Northern and Southern species associations where the climate is created by the mixing of the Gulf Stream and cooler Northern currents. As a result, plant communities at the site are a combination of those found in the North and the South.

Rachel Carson, located at the confluence of the Newport and North Rivers, represents a sheltered coast/tidal river estuarine system within the Carolinian Biogeographic Region, North Carolinas Subregion. This estuarine system is generally shallow, well mixed and strongly influenced by the river and inlet processes and tides. As a result of its proximity to Beaufort Inlet, the Western section of the complex – Carrot Island, Bird Shoal and Town Marsh – maintains a salinity close to that of the Atlantic Ocean. Middle Marsh, located to the East of Carrot Island, at the mouth of the North River, has less predictable salinity patterns.

Masonboro Island near Wilmington is an entire undisturbed barrier island complex on a pristine, non-drowned river mouth estuary. It is within the Carolinian Biogeographic Region, North Carolinas Subregion. Due to the influence of Masonboro and Carolina Beach inlets, the salinity varies but is generally high to moderate.

Zeke's Island South of Wilmington is typical of a barbound lagoonal estuarine system within the Carolinian Biogeographic Region, North Carolinas Subregion. The site's physical environment is dominated by ocean and inlet processes. Its salinity is high because a rock jetty built around the West side of the site prevents the Cape Fear River from flushing through New Inlet.

Detailed information on the reserve's habitats and species lists, as well as site maps and access information, is available from the Division of Coastal Management of the Department of Environment and Natural Resources.

Educational State Forests

Forestry is the second largest industry in North Carolina, contributing over \$20 billion annually to the state's economy and providing 144,000 jobs for North Carolinians. Approximately 664,000 forest landowners collectively own 11.54 million acres of the state's 16.77 million acres of privately-owned forest land (Source: <http://www.dfr.state.nc.us/>). To facilitate the better understanding of the value of forests, the N.C. Division of Forest Resources operates a system of Educational State Forests (ESF) for use as living environmental centers.

Educational State Forests vary from 142 to 890 acres. These unique forest environments are located from the far West to the lower coastal plain. The widely varied terrain offers a rich mixture of pine and hardwood forests. Features are made accessible by a series of well-marked trails accented by exhibits and displays depicting the ecology of a managed forest.

Each forest features self-guided trails that include exhibits, tree identification signs, a forest education center and a talking tree trail. Picnic facilities further enhance the forests.

Specially trained rangers are available to conduct classes for school and other youth groups. Teachers or group leaders choose from a selection of 30-minute programs that cover all aspects of the forest environment – from soil, water and wildlife to timber and forest management.

Every summer, the Division offers an environmental education workshop at each forest for teachers and other leaders of youth groups. The “Investigating you Environment” workshops focus on methods of teaching outdoors. This 30-hour workshop offers teacher renewal credit.

The six Educational State Forests are: Clemmons, in Johnston and Wake counties; Holmes, in Henderson County; Jordan Lake, in Chatham County; Rendezvous Mountain, in Wilkes County; Turnbull Creek, in Bladen County; and Tuttle, in Caldwell County. A seventh ESF, Mountain Island, is planned to open in the future near Mount Holly, NC.

N.C. Conservation Income Tax Credit Program

This effective land and water conservation program provides tax incentives for landowners to donate land for conservation purposes. Approximately 68,500 acres of land and conservation easements have been donated so far. The donated land is worth an estimated \$121.2 million and has cost the state only approximately \$16.7 million, equating to \$7.25 of direct conservation investment for every dollar invested by the state. The program is administered by the N.C. Department of Environment and Natural Resources.

N.C. Department of Transportation Office of Bicycle and Pedestrian Transportation

The Bicycle Program was established in December 1973 and was formally mandated by the Bicycle and Bikeway Act of 1974 with the following duties:

1. assisting local governments with the development of bicycle programs and the construction of bicycle facilities;
2. developing policies, procedures and standards for planning, designing, constructing, maintaining, marking and operating bicycle facilities and providing for the safety of bicyclists and motorists;
3. developing demonstration projects and safety training programs; and
4. developing and constructing a state bikeway system.

Working within these parameters, the Bicycle Program has developed a comprehensive approach to improving the bicycling environment in North Carolina. Efforts that have begun to make an impact are as follows:

1. Bicycle Transportation Improvement Program — Starting in 1987, Federal Highway Administration funds were made available for a variety of state and local bicycle projects. These range from greenway bicycle paths and on-road bicycle improvements to mapping and

signing projects and safety education programs.

2. Development of Standards, Guidelines, and Procedures — The Bicycle Program is actively involved in developing and testing standards for planning and construction of bicycle facilities.
3. Technical Assistance to Local Governments — Since its inception, the Bicycle Program has worked closely with communities throughout the state to help them develop and refine their local bicycle programs. Planning assistance, technical expertise and program materials for all phases of local bicycle programming, from construction projects enforcement and educational programs, are provided.
4. Bicycling Highways System — Initiated in 1975, this project entails the designation, mapping and signing of bicycle touring routes, which direct bicyclists away from more heavily traveled roads to safer alternate routes. To date, nine routes covering 3,000 miles of roads have been developed. Approximately 10,000 maps are distributed each year.

In April 1992, responsibility for pedestrian transportation was added to the Bicycle Program and the name changed to the Office of Bicycle and Pedestrian Transportation.
(www.ncdot.org/transit/bicycle/)

N.C. Historic Sites

North Carolina Historic Sites allow visitors to see the state as it was. Twenty-three sites scattered across the state open doors of the past by preserving and interpreting the history of people that have lived in North Carolina, from Native American cultures to colonial communities to early agriculture and industry. Visitor centers with exhibits filled with artifacts and multimedia presentations are located at most sites, as are picnic facilities.

The historic sites seek to preserve significant properties and artifacts related to events, people and themes important to the state's past. These sites provide a valuable resource for teaching and learning about the past. (www.ah.dcr.state.nc.us/sections/hs/)

N.C. Wildlife Resources Commission

North Carolina state law established the Wildlife Resources Commission to manage and regulate the state's wildlife resources and to enforce those regulations. The agency is responsible for enforcing boating laws on inland waters. It sells hunting, fishing and trapping licenses and registers over 3,000 boats owned by North Carolina residents. The agency also provides wildlife-related outdoor recreational opportunities.

The Commission manages approximately two million acres of state-owned, federally owned and

privately owned gamelands on which the public may fish and hunt with a special permit. These areas are scattered across the state. The Commission also maintains boating access areas that provide free 24-hour access to 80 different bodies of water in North Carolina.

The Commission manages and regulates fishing in the inland waters of North Carolina. Emphasis is placed on the conservation of wild, naturally reproducing fish populations and communities. The Commission operates five fish hatcheries to produce and rear fish, which are stocked into public waters where habitat limits natural reproduction.

Through the N.C. WILD and N.C. CATCH environmental education programs, the Commission provides workshops to approximately 4,000 adult educators annually. These educators then use program materials to supplement school youth organization curricula and also teach ecological concepts and outdoor skills. (www.ncwildlife.org/)

N.C. Zoological Park

The N.C. Zoological Park, located on 1,448 acres six miles Southeast of Asheboro, is among the world's largest land area zoos and was the first one planned from its inception around the natural habitat concept of zoological exhibits. The purposes of the zoo are education, entertainment, recreation, research and the conservation, preservation and propagation of plant and animal life.

The zoo receives approximately 800,000 visitors a year. The indoor exhibits include the Forest Aviary, the African Pavilion and the Sonora Desert. Outdoors, the zoo offers a 300-acre African World, which exhibits African animals in a variety of natural habitats, and the North American region. Six other regions representing Asia, Europe, South American, Australia, and the World of Seas are in the planning stages. (www.nczoo.org/)

FEDERAL PROGRAMS

Federal roles in outdoor recreation include the management of federally owned properties such as parks, forests, wildlife preserves and reservoir areas, and the administration of financial and technical assistance programs to aid state and local governments and private citizens. In North Carolina, the federal agencies that primarily provide outdoor recreational opportunities are the Department of the Interior, the Department of Agriculture and the Department of Defense.

U.S. Department of the Interior

The Department of the Interior was created by Congress in 1849. The Department's recreational responsibilities include administering the nation's scenic and historic areas; conserving, developing and utilizing fish and wildlife resources; and coordinating federal and state recreational programs. Within the Department, two agencies provide outdoor recreation resources and programs in North

Carolina: The National Park Service and The U.S. Fish and Wildlife Service.

The National Park Service

The National Park Service (NPS), created by Congress in 1916, is charged with conserving scenery, wildlife and natural and historical objects, and administering the nation's parks, recreational areas and historical areas. Acquisition and development of these resources for such purposes as providing camping, boating, swimming, hiking and historical interpretation are governed by NPS's determination of public need and demand for such facilities.

Besides being directly responsible for providing outdoor recreation resources, NPS took on a number of other recreational responsibilities upon its consolidation with the Heritage Conservation and Recreation Service in 1981. These include planning, coordinating and developing national recreation policy; conducting surveys of recreational resources and needs in the United States; and developing a plan to meet these needs. The NPS also provides financial and technical assistance for state recreational planning and land acquisition and development.

In North Carolina, the NPS administers 10 areas that are set aside for their natural, recreational and historical interest. These include the Blue Ridge Parkway, the Great Smoky Mountains National Park, Cape Hatteras National Seashore, Cape Lookout National Seashore, Moores Creek National Battleground, the Wright Brothers Memorial, the Carl Sandburg Home, Fort Raleigh National Historic Site and Guilford Courthouse National Military Park. These areas offer a wide range of public outdoor recreational activities such as camping, swimming, boating, fishing, nature study, hiking and picnicking. (www.nps.gov/)

The National Park Service also administers the federal Land and Water Conservation Fund (LWCF). An annual apportionment from LWCF is made available to the state for distribution to state agencies and local government entities for approved, high-quality outdoor recreational projects meeting needs identified in the Statewide Comprehensive Outdoor Recreation Plan. These funds are administered at the state level by the Division of Parks and Recreation of the Department of Environment and Natural Resources.

U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service's goals for public use of its areas and facilities are to expand man's understanding of his environment and his appreciation of fish and wildlife ecology. The service provides visitors to its sites with high quality, safe and enjoyable recreational experiences oriented towards wildlife and wildlife habitat appreciation. The Service manages 11 national wildlife refuges in North Carolina comprising approximately 416,000 acres. They are Alligator River, Cedar Island, Currituck, Dismal Swamp, Mackay Island, Mattamuskeet Lake, Pea Island, Pee Dee, Pocosin Lakes, Roanoke River and Swanquarter. Most of these are limited-purpose outdoor recreation areas that provide primarily for wildlife habitat, but they also provide opportunities for hunting, fishing and photography. (<http://refuges.fws.gov/>)

U.S. Department of Agriculture

The Department of Agriculture has three agencies that administer programs affecting the supply of outdoor recreational resources in North Carolina: the U.S. Forest Service; the Natural Resources Conservation Service; and the Farmers Home Administration.

U.S. Forest Service

The U.S. Forest Service (and the national forest system) was created by Congress in 1905. The responsibility of the Forest Service in the field of outdoor recreation is to develop the recreational potential of national forests in conjunction with other multiple uses. The Forest Service also cooperates with other federal, state and local agencies in planning and developing recreational resources on other federal, state, local and private lands.

In North Carolina, the Forest Service administers four areas: the Croatan National Forest (159,866 acres); Nantahala National Forest (530,899 acres); Pisgah National Forest (505,296 acres); and the Uwharrie National Forest (50,183 acres). The areas, which comprise over 1.24 million acres, are a significant component of North Carolina's recreational resources (Figure III-2). They contain some of the state's most pristine lands, including extensive woodlands, springs, streams and mountains. Within these four national forests, the Forest Service manages many developed public recreation sites. (www.cs.unca.edu/nfsnc/)

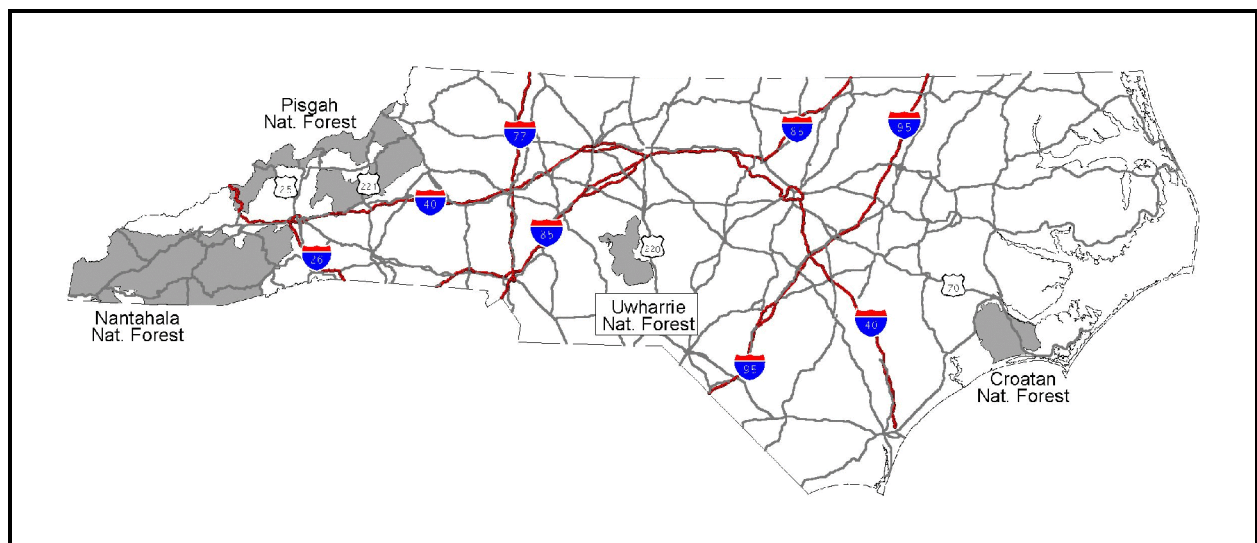


Figure III-2. National Forests in North Carolina

Natural Resources Conservation Service

The Natural Resources Conservation Service has responsibility within the U.S. Department of Agriculture for providing leadership in the planning of income-producing recreational enterprises on private land and for liaison with other federal, state and local agencies, assisting them with

recreational development. Technical assistance is provided through local soil and water conservation districts. The Natural Resources Conservation Service has traditionally provided financial and technical assistance for recreation projects through the Small Watershed Program and the Resource Conservation and Development projects. The primary emphasis in these programs is on erosion control and water conservation, therefore, limited technical and financial resources are available for recreation-related projects. (www.nrcs.usda.gov/)

Farmers Home Administration

The Farmers Home Administration assists farm and ranch owners by providing recreation loans for the development of income-producing outdoor recreation enterprises. The facilities provided by farmers and ranchers may include freshwater ponds and facilities for horseback riding and camping. Loans can also be obtained for improving recreation enterprises. Under rules developed by the agency to implement the Food Security Act of 1985 (P.L. 99-198), beginning in 1987 farmers and ranchers were permitted to retire part of their government-insured debt by donating 50-year conservation easements on portions of their lands. Agreements must be developed with public land management agencies or private organizations to manage the easements for public benefit for fish and wildlife, conservation or recreation. The Natural Resources Conservation Service is responsible for selecting a land manager for each particular donation and for developing the management agreements.

U.S. Departments of Interior and Agriculture

In addition to their responsibilities noted above, the Department of the Interior and the Department of Agriculture are co-authorized to execute other outdoor recreational and natural resource preservation programs. In North Carolina, two such programs have been implemented by these agencies, primarily through independent action.

National Wilderness Preservation System

The Wilderness Act of 1964 (16 United States Code 1131) established a National Wilderness Preservation System. Management of areas in the system is the responsibility of the agency (or agencies) having jurisdiction over the areas prior to their inclusion in the system.

There are currently 12 designated wilderness areas in North Carolina, consisting of 111,342 acres. Eleven of these are administered by the U.S. Forest Service. They are: Ellicott Rock, Joyce Kilmer-Slickrock, and Southern Nantahala, located in the Nantahala National Forest; Linville Gorge, Middle Prong, and Shining Rock, located in the Pisgah National Forest; Birkhead Mountains, located in the Uwharrie National Forest; and Catfish Lake South, Pocosin, Pond Pine and Sheep Ridge, located in the Croatan National Forest. The U.S. Fish and Wildlife Service administers the remaining wilderness area, Swanquarter. The U.S. Forest Service is studying other areas for possible wilderness designation. (www.wilderness.net/nwps/default.cfm)

National Wild and Scenic Rivers System

The National Wild and Scenic Rivers Act of 1968 (16 United States Code 1271) states that Wild or Scenic rivers must *"possess outstandingly remarkable scenic, cultural, or other similar values."* Further, the Act requires that they *"shall be preserved in a free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations."*

Five rivers in North Carolina have been designated into the national system: the New River (26.5 miles), the Horsepasture River (4.5 miles), the Lumber River (81 miles), all of the Chattooga River and Wilson Creek (23.3 miles). The New, Horsepasture and Lumber rivers are also N.C. Natural and Scenic Rivers and are administered by the state.

National Trails System

The National Trails System Act of 1968 (16 United States Code 1241) provides the framework for establishing a nationwide system of scenic, recreational and historical trails. The Secretary of the Interior and the Secretary of Agriculture are both authorized to administer trails in the System under the Act.

National recreational trails also play an important role in the National Trails System. As declared in the Act, national recreational trails are intended to be established near urban areas and in established scenic areas to serve the constantly increasing outdoor recreational needs of an expanding population and to promote close-to-home recreational opportunities. Administrative responsibility for designating and managing recreational trails was assigned to both the Secretary of the Interior and the Secretary of Agriculture. (www.ncrc.nps.gov/progrms/nts/)

U.S. Department of Defense

The Department of Defense, established in 1949, includes the Department of the Army, the Department of the Navy, and the Department of the Air Force. Each of these military services is involved in providing outdoor recreational opportunities in North Carolina.

U.S. Department of the Army, Corps of Engineers

Along with its primary responsibility for navigation, flood control, beach erosion control and river basin studies, the Corps of Engineers has devoted considerable attention to the establishment of recreational facilities. It is the policy of the Corps to plan for and provide outdoor recreational resources and facilities at all of its water resources projects. The Corps' general authority for recreational development stems from the Flood Control Act of 1944, which was later expanded by the Federal Water Project Recreation Act of 1965 (16 United States Code 460). The latter act directs that full consideration be given in each project to opportunities for outdoor recreation and fish and wildlife enhancement, and it established outdoor recreation and preservation of wildlife and fish as a full project purpose.

In North Carolina, the Corps has developed four water resource projects that have recreational facilities: John H. Kerr Reservoir; B. Everett Jordan Reservoir; Falls Lake; and W. Kerr Scott Reservoir. (www.saw.usace.army.mil/domino/CESAW.nsf) Resources and facilities are available at these areas for a wide variety of activities, including freshwater swimming, boating, fishing, camping, field sports, picnicking, hiking and hunting. The Corps leases many of these areas and facilities to the N.C. Division of Parks and Recreation and the Wildlife Resources Commission for management. The Corps also operates recreational facilities – boat launching and picnicking – at the three locks and dams on the Cape Fear River.

In addition to its public works development programs, the Corps participates with the state and other public bodies in making recreational opportunities available adjacent to Corps projects. This participation takes the form of cost-sharing, assistance in planning and design, and the direct development of facilities.

Military Installations

The Department of Defense provides land at North Carolina military installations for recreational purposes. Although public outdoor recreation is not a major function of the Department of Defense, its contributions in this regard are, nevertheless, important to North Carolina's overall outdoor recreation program. Generally, all military installations offer some degree of outdoor recreation programs for military personnel, their dependents and their guests. Access to their resources for recreational use by the general public, however, is usually limited. But departmental policy provides that when a military installation's mission does allow public access, formal agreements may be reached with appropriate state or local agencies to provide opportunities for a wide variety of outdoor recreational activities.

U.S. Department of Housing and Urban Development

The Department of Housing and Urban Development (HUD) administers two programs that, in the past, have had an impact upon outdoor recreation in urban areas. Since 1981, however, funding for these programs has been reduced substantially.

Community Development Block Grants Program

HUD provides Community Development Block Grant funds to local governments through its Entitled Grant Program and Small Cities Program. These programs were established as a result of Title I of the Housing and Community Development Act of 1974, as amended through the Housing and Community Development Amendments of 1981 (42 United States Code 5301). The Entitled Grants Program serves entitlement communities (municipalities of 50,000 or more, urban counties of 200,000 or more and central cities under 50,000 located in Metropolitan Statistical Areas). The Small Cities Program serves non-entitlement municipalities and counties. Both programs authorize a 100 percent level of funding to public agencies for the preservation or provision of urban open space lands that have park, recreational or historical value. In addition, the programs provide for the acquisition, construction, reconstruction or installation of parks, playgrounds and recreational

facilities where assistance for such facilities is unavailable from other federal programs.

U.S. Department of Transportation

The U.S. Department of Transportation, established in 1968, includes the Federal Highway Administration. This agency administers the Federal Aid Highway Program, which provides grants to states and local governments for use in developing bicycle and pedestrian facilities.

Federal Aid Highway Program

This program was established by Title 23 United States Code, as revised by the Surface Transportation Assistance Acts and various other amendments. The program provides annual discretionary grants to qualifying governments for use in the acquisition of rights-of-way and the planning, construction, improvement and rehabilitation of interstate, primary, secondary and urban roads and highways. Funds may be used for capital improvements such as bicycle and pedestrian facilities within highway rights-of-way.

National Oceanic and Atmospheric Administration

The National Oceanic and Atmospheric Administration supports public and private program affecting outdoor recreation in North Carolina's coastal areas. The Office of Ocean and Coastal Resources Management is responsible for providing federal leadership in the management of the nation's coastal and marine resources. This is accomplished by providing management, research and technical assistance to federal, state and local governments and the private sector through the agency's Coastal Zone Management Program and National Marine Sanctuaries and Estuarine Research Reserves Program.

Coastal Zone Management Program

The Federal Coastal Zone Management Act of 1972 (16 United States Code 1451), as amended, provides for grants-in-aid to coastal states with federally approved coastal zone management programs.

National Marine Sanctuaries and Estuarine Research Reserves Program

This program provides financial assistance to eligible public and private entities for the acquisition, development and administration of land and water resources within areas designated by the Secretary of Commerce as marine sanctuaries or estuarine research reserves. These areas are set aside as laboratories for educational, recreational and research purposes. The program also makes financial assistance available to universities and private organizations for independent research projects, such as the study of water quality, water current modeling and the impacts of mosquito spraying and similar activities on aquatic life in sanctuaries and reserves. In North Carolina there are four such reserves that protect habitat for hundreds of species of fish, birds and other wildlife and provide

environmental education opportunities. The reserves are administered by the Division of Coastal Management, N.C. Department of Environment and Natural Resources.

LOCAL AGENCIES AND PROGRAMS

County Roles and Responsibilities

North Carolina has 100 counties, varying in character from the densely populated metropolitan counties such as Mecklenburg and Wake, to sparsely populated rural counties such as Jones and Gates. The counties have varying outdoor recreational needs that have prompted the establishment of different recreational programs.

Twenty-five of North Carolina's counties do not have officially established outdoor recreational programs. For these jurisdictions, provision of resource-based activities is often limited to maintenance of picnic areas or boat ramps. User-oriented facilities are normally available only at public schools, municipal parks, state parks and federal areas. Seven counties have no county or municipal recreation department: Alleghany, Bertie, Camden, Hyde, Jones, Montgomery and Tyrrell.

Seventy-five of North Carolina's counties do have established recreational programs with parks, facilities and program activities. The larger land area of counties, as compared to municipalities, provides for a wider range of resources and makes available a greater variety of outdoor recreation possibilities. As a result, a county outdoor recreational program may offer a combination of resource-based and user-oriented activities to the public. Beaches, swimming sites, boat access sites, picnic areas, scenic areas and occasionally campgrounds are among the types of resource-based areas and facilities provided through county programs. Counties often provide facilities such as playgrounds, sports fields, tennis courts and other active outdoor recreation facilities as well.

Counties generally provide the resource-based and locally oriented outdoor recreational areas that are not large enough to be managed feasibly at the state or federal levels, or which do not have resources of statewide or national significance. Such areas constitute an invaluable part of the overall outdoor recreational effort in North Carolina and are indispensable to well-balanced statewide outdoor recreation.

Municipal Roles and Responsibilities

One hundred and forty-six municipalities have recreational programs and facilities of some type, with trained staff involved in the administration of parks, facilities and activities. These programs and facilities vary greatly, depending mainly on the population of the municipality. Generally, the smaller the town, the more limited the facilities. Smaller towns are more likely to rely on counties, local school systems or private organizations and groups to administer recreational activities.

Because of population densities and the lack of large open-space areas, most municipal recreation

systems tend to concentrate their efforts on providing services involving more intensive user-oriented facilities that require relatively little space in proportion to the use accommodated. Typical municipal outdoor recreational facilities include playgrounds, swimming pools, ball fields, tennis courts and picnic areas. A few municipalities even provide golf courses.

Because municipal programs typically provide recreational facilities and programs in urban areas, they have only a limited bearing on statewide natural resource-based outdoor recreation. There are some exceptions, however, especially in the cases of parks located on bodies of water or coastal municipalities that provide public beach access.

Although most municipal programs do not typically provide resource-based outdoor recreational facilities, municipalities do play a vital role in providing facility-dependent recreational opportunities in North Carolina. The role of municipal programs will likely grow in importance as increased public emphasis is placed on recreation closer to home. Since municipal recreation agencies are closest to the populace, they are usually the first to feel the pressures to establish programs that meet the demands of residents.

PRIVATE AGENCIES / PROGRAMS

In addition to publicly provided outdoor recreation, a wide array of recreational opportunities are offered by the private sector. Many private agencies whose primary mission is not land management use recreation to achieve their objectives or create recreational opportunities as a consequence of their activities. In addition, many other recreational opportunities are provided by diverse sources such as churches, businesses and private swimming, tennis, fitness and country clubs.

Young Men's Christian Association

The YMCA, founded in 1944, has as its mission to put Christian principles into practice through programs that build healthy body, mind and spirit for all. Although each YMCA is associated with the national organization, programs, staffing and style of operation are set locally, run by volunteer boards. YMCA services are tailored to the community in this way. For example, the YMCA has a campus operation at Guilford College in Greensboro. Programs vary from those for older adults to pre-school ages. Sixty-three YMCAs in North Carolina serve over 325,000 members and regular participants.

Young Women's Christian Association

The YWCA has eight clubs in North Carolina. The organization's focus in the community is to provide programs and services to women, girls and their families by offering a wide range of services and programs that enrich and transform lives. YWCAs assist with programs and information that deal with a variety of critical issues including child and youth development, and health and fitness.

Boys Clubs and Boys and Girls Clubs

The 38 North Carolina Boys Clubs and Boys and Girls Clubs are nonprofit corporations that serve youngsters, age 6 to 18, with after-school, weekend and evening activities and programs. Nationwide, over half the young people in these clubs are from minority families, families with low annual incomes and families with four or more children; 49 percent are from households headed by single parents. Volunteers, career professionals and staff attempt to build the self-esteem and motivation of participating youngsters through club health programs, physical education and environmental education programs, all of which incorporate outdoor recreational activities. (www.bgca.org)

Boy Scouts and Girl Scouts of America

The Boy Scouts and Girl Scouts each have seven councils in North Carolina. Camping, environmental education, swimming and canoeing are emphasized by both scout groups. Most of these activities are centered in primitive to semi-developed camps either leased or owned by the councils. Outdoor activities are offered throughout the year.

4-H Clubs

4-H, a program of the NC Cooperative Extension Service, is jointly funded by the federal, state and county governments. Its mission is to provide youth and adults with opportunities to develop decision-making, problem-solving and leadership skills through experience. In all 100 counties, each 4-H program is determined by a local advisory board.

North Carolina 4-H clubs have over 200,000 members 6 to 19 years old. Twenty-six thousand volunteers, supervised by professional staff, operate the 4-H program as group leaders, instructors, donors and advisory board members. Although it was once considered a program for agricultural communities, urban counties such as Wake and Guilford have strong 4-H programs.

Outdoor education emphasizes natural resource conservation. Youngsters participate in outdoor recreational activities in the community, including camping. The North Carolina organization operates five camps with approximately 1,400 acres. All of these are operated on the traditional summer camp model except for one camp, Betsy Jeff Penn, which functions as an outdoor education center during the school year. Children in the third through eight grades have the option of staying onsite two or four nights. The environmental education program includes studies on weather, ecology, wildlife and outdoor activities such as orienteering. (www.ces.ncsu.edu/depts/fourh/)

COMMERCIAL PROVIDERS

Commercial providers of outdoor recreation satisfy significant public needs in North Carolina. Commercial firms can finance projects requiring large capital investments and react more quickly to changes in public demands. Specialized needs of relatively small groups of participants can also be addressed by commercial recreation providers. Although commercial providers are distributed across North Carolina, they are concentrated around vacation destinations.

Whitewater rafting outfitters in Western North Carolina serve thousands of floaters each year. On the Nantahala River alone, approximately 263,269 people floated down the river in 1996. Approximately 80 percent of these floaters were taken by one of the 15 commercial outfitters on the river. Outfitters also operate on several other popular whitewater rivers such as the Nolichucky, French Broad and Tuskasegee rivers.

Another major recreation industry in Western North Carolina is snow skiing. Nine major ski areas are located in the Western part of the state. The average North Carolina skier is college age, has completed some college and traveled 156 miles to the slope, according to ski industry statistics. While total annual participation varies considerably depending on snowfall, between 450,000 and 735,000 skiers participate annually.

Golf is another activity that is provided primarily by the commercial sector. In North Carolina, there were 573 golf courses in June, 1999 compared to 369 in 1980. Many are private and daily fee courses. More courses are in the planning or construction stage. The official 2000 Golf Guide lists 340 courses available for public play. Golf is a popular pastime of both North Carolinians and out-of-state visitors. A 1999 study by NC State indicates that nearly 15 million rounds of golf are played across North Carolina annually, with direct spending attributed to golfers amounting to \$1.3 billion.

Most of North Carolina's campgrounds are privately owned. More than 300 are dispersed throughout the state, offering over 15,000 campsites. This represents the vast majority of the 19,000 or so public and private campsites in North Carolina.

Private, for-profit recreational enterprises offer a variety of other outdoor opportunities in North Carolina. Such enterprises include driving ranges and mini-golf, water parks, amusement parks, batting cages, paint ball facilities, summer camps, private zoos, gem mining, scenic railroads, cruises, deep sea fishing, bus tours, professional baseball and nature tours. Because of its size, complexity and changing nature, however, private outdoor recreation is extremely difficult to inventory in a comprehensive manner.